

Meeting Minutes Transmittal/Approval
Unit Managers' Meeting
200 Area Groundwater and Source Operable Units
1200 Jadwin, Richland, Washington
August 16, 2007

APPROVAL: Larry Romine Date: 9/20/07
Larry Romine, 200 Area Unit Manager, DOE/RL

APPROVAL: Arlene Tortoso Date: 9/20/07
Arlene Tortoso, 200 Area Assistant Manager, DOE/RL

APPROVAL: Craig Cameron Date: 9/24/07
Craig Cameron, 200 Area Unit Manager, EPA

APPROVAL: John Price Date: 9/20/07
John Price, 200 Area Unit Manager, Ecology

Note pen and ink changes
in facilities section by Cameron.
Also some in other parts of Attachment
5 that appear to be Price's, C.E.C.

Please note:

corrections were made to text
with red-line strike-out for
clarity. Original pen and ink
changes are shown in
Attachments 20 & 21

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**DISTRIBUTION
UNIT MANAGERS' MEETING,
200 AREA GROUNDWATER SOURCE OPERABLE UNITS
August 16, 2007**

DOE/RL

(No hard copy distribution)

EPA

Craig Cameron

B1-46

Ecology

John Price

H0-57

FH

Janice Williams (original)

E6-35

Administrative Record (2)

H6-08

Correspondence Control

A3-01

Minutes of the 200 Area Unit Managers' Meeting of August 16, 2007 are attached.
Minutes are comprised of the following:

Attachment 1	Agenda
Attachment 2	Attendance Record
Attachment 3	Agreements and Issues List
Attachment 4	Action Item List
Attachment 5	Operable Units and Facilities Status
Attachment 6	200-UP-1 Uranium
Attachment 7	200-UP-1 Technetium-99
Attachment 8	200-ZP-1 FY07 Pumping Rates
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Attachment 11	200-ZP-1 Technetium-99 Field Screening Data (Extraction wells 299-W15-44 and 299-W-15-765)
Attachment 12	200-ZP-1 Nitrate Field Screening Data (Extraction wells 299-W15-44 and 299-W15-765)
Attachment 13	Comparison of Maximum Carbon Tetrachloride Rebound Concentrations Monitored at 200-PW-1 Soil Vapor Extraction Sites
Attachment 14	Proposed N Well Location Map
Attachment 15	O Well Location Well
Attachment 16	Location Map of Well 699-55-55
Attachment 17	Tc-99 Plume Map Interpretation Based on 2005 Groundwater Annual Report (PNNL 15070)
Attachment 18	Additional Monitoring Well 299-E33-40 to Monitoring Network

Attachment 19	Photo of 12" ductile Raw Water leak
Attachment 20	Original page 8 of Attachment 5, 200 Area Unit Managers' Meeting Operable Units and Facilities Status, August 16, 2007, <u>D&D OUs</u> .
Attachment 21	Original page 9 of Attachment 5, 200 Area Unit Managers' Meeting Operable Units and Facilities Status, August 16, 2007, <u>Facilities Status</u>

200 AREA UNIT MANAGERS' MEETING DRAFT AGENDA

1200 Jadwin/Rm 1-C-1

August 16, 2007

8:30 – 10:15 AM

GROUNDWATER AND SOURCE OPERABLE UNITS

- Status Review of OUs

200-UW-1, 200-CW-3 AND FACILITIES

- Status Review
- Outstanding Action Items/Issues

200 Area Unit Managers Status Meeting
August 16, 2007

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Frank Roddy	DOE	2nd MG, 1st 2nd MG, SW, H-2, URT, wells	372-0945
Dale Black	FH	TPA Integration	376-0740
Jon Lindberg	FHI	PO-1	376-4511
Greg Thomas	FH	BP-5	373-3907
Arleen Tortoso	DOE	2nd Area	373-9631
Dave Erb	FH	200-W G-W	373-4457
Shawey Simon	ODOE		(541) 963-0853
Rick Engelmann	FH	TPA	376-7485
Mark Byrnes	FH	2P-1 Project Manager	373 3996
John Price	Ecology	TPA Proj. Mgr	372-7921
Ron Brunke	FH	2nd 1 CS-1	376-2663
Jim Vanni	Ecology		372-7930
Zelma Jackson	Ecology	200 OU	372-7910
Ann Shattuck	FH	FW-130	376-8756
Pam Ankrum	FH	MG-1, UR-1, Eco PM	378-7222
Jason Hulstrom	FH		
Sandra Lilligren	NPT		208-843-7375
John Winterhelder	FH		372-8144
Rick Oldham	FH	ECO	372-2826
Jennie Sauer	FH		376-3762

**Issue Resolution Meeting
Agreements and Issues List
August 16, 2007
200 Area Unit Managers' Meeting**

Agreement: None Identified

Issue: None Identified

200 Area Unit Managers' Meeting

OPEN ACTION ITEM TRACKING

Action #	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Status
80	Send report from Remedial Action Decision Making panel (Tom Fogwell)	FH-Byrnes	ECY/EPA Price/Goswami/Cameron	10/18/06	11/16/06	9/20/07	Document has been completed but is undergoing management review.
98	A response from Ecology to an email from Bryan Foley, sent to John Price in May and again on June 19, 2007. RL has requested Ecology to approve the last published version of the 200-TW-1/2/PW-5 Remedial Investigation Report based on a commitment to address specific outstanding regulator concerns from the last report in the next revision of the 200-TW-2 Feasibility Study.	Ecology-Price	RL-Foley	6/21/07	8/1/07		Completed-email from John Price to Bryan Foley dated 7/13/07 stating formal letter to follow.
99	Provide regulators with a task level schedule for FS preparation on 200-MG-1 and 200-MG-2.	FH-Ankrum	ECY/EPA Price/Cameron	7/18/07	7/25/07	9/20/07	The regulatory agencies have requested a compressed schedule; FH is reviewing the options and discussing with RL.
100	Ecology will provide a letter on how the 200-PW-2/4 RI will be included in the FS. Ecology to meet with Tony Miskho and Phil Rogers on July 30 to discuss pathforward on TSD closure plans.	Ecology-Price	RL-Tortoso	7/18/07	7/30/07	9/20/07	Ecology will meet with RL and FH the week of August 20 to further discuss this issue.
101	Ecology provided an email to Fluor Hanford suggesting that 207-A South Retention Basin be included in the 200-CS-1 OU to be similarly addressed in the permit. RL needs to review the email to determine their response and path forward on Ecology's proposal to move 207-A South from the 200-MG-1 OU to the 200-CS-1 OU.	RL-Charboneau/Foley	Ecology-Price	8/16/07	8/31/07		
102	The issue of EPA approval of all SAPs (including those for which Ecology is the lead regulatory agency) is being elevated to the IAMIT Executive Committee. The results of the Executive Committee meeting on this issue should be reviewed by RL and reported to the Tri-Parties at the next UMM.	RL-Charboneau	All	8/16/07	9/20/07		
103	Provide email to EPA recommending a revised reporting schedule for SVE monitoring	FH-Rohay	EPA-Faulk RL-Tortoso	8/16/2007	9/20/2007		

CERCLA 5-Year Review Action Items

Action #	Action/Subject	Assigned To	Due Date	Status
13-1	Complete a data quality objective process and sampling plan to further characterize the technetium-99 groundwater plume near T Tank Farm.	Fluor Hanford		Complete
14-1	Assess treatment options to address technetium-99 near T Tank Farm.	Fluor Hanford		Complete
15-1	Complete data quality objective process and sampling plan to further characterize the high soil conductivity measurements detected at B/C cribs and trenches.	Fluor Hanford	12/1/2007	

200 Area Unit Managers' Meeting

Action #	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Status
16-1	Increase the pump size in 200-ZP-1 extraction wells 299-W15-45 and 299-W15-47.	Fluor Hanford					Complete
17-1	Evaluate expanding the soil-vapor extraction operations. Also, specifically review converting former groundwater extraction well 299-W15-32 to a soil-vapor extraction well.	Fluor Hanford					Complete
18-1	Prepare an explanation of significant difference for 200-UP-1 Interim ROD	Ecology			6/1/2008		

200 AREA UNIT MANAGERS' MEETING OPERABLE UNITS AND FACILITIES STATUS

August 16, 2007

200-UP-1, 200-CS-1, 200-CW-1 OU Group

200-UP-1

(M-15-17A, 11/30/10, Feasibility Study/Proposed Plan) Ecology

- The Uranium concentration for the April sampling of well 299-W19-36 identified a spike of 614 ug/L.
 - The July sample results identified a Uranium concentration of 445 ug/L, however the Tc-99 value is elevated (13,000 pCi/L).
 - All other values remain below the interim RAOs of 480 µg/L and 9,000 pCi/L respectively (**Attachments 6 and 7**).
- RI/FS Work Plan:
 - Six of 12 new 200-UP-1 wells (UP1, UP2, UP3, UP4, UP5, and UP11) required by the RI/FS Work Plan have been installed.
 - Planning for the remaining six wells (UP-6, UP-7, UP-8, UP-9, UP-10, and UP-12) has started.
- Tc-99 Increase @ S-Farm
 - The Tc-99 levels in well W22-44 increased from 3,400 pCi/L to 6,440 pCi/L in the last sampling (March of 2007). The derived groundwater standard is 900 pCi/L.
 - The well is located directly east of S farm.
 - Data suggest a rather narrow wave of increased Tc-99 is passing through. The groundwater flow direction is currently to the east.
 - Past investigations concluded that the Tc-99 plume is associated with past tank leaks. The 216-S-3 Crib released approximately 4.2 million liters between 1953 and 1956.
- Pump and Treat
 - On 4/19/07, the pumps in wells W19-36 and W19-43 were restarted. Currently, the project is pumping approximately 12 gpm. These two wells address the higher uranium groundwater concentrations found in the area.
 - As of 7/31/07 ~ 1,664,113 gallons had been pumped to LERF Basin #43.
 - Treatment of the water is scheduled to start August 20.

200-CS-1

Feasibility Study/Proposed Plan (Ecology)

- Activities to support Draft B of the feasibility study and proposed plan continue.

Remediation Investigation Report (Ecology)

- The July meeting minutes include the Ecology and DOE agreement that the RI

Report can be placed in the Administrative Record as a final document, that RL is including relevant reformatted analytical data tables in the Draft B FS scheduled for submittal in September 2007, and that the agreement will be placed in the AR. The Administrative Record 'Document Details' - AR/PIR (Administrative Record/PIR Public Information Repository) Record Details for Record Accession Number, will include the July UMM minutes as well as the November 30, 2004 RL transmittal letter requesting Ecology approval, the January 28, 2005 Ecology letter requesting analytical table reformatting, and the RI Report.

Discussion during meeting: Ecology indicated that they are not planning on processing a ROD for the 200-CS-1 OU, consistent with a previous letter dated April 26, 2006, John Price, Ecology to Larry Romine, DOE-RL. Ecology expects to have RCRA permit draft closure chapters for all the TSDs in 200-CS-1 within 5 weeks. Ecology indicated they were aware of the ongoing activities to revise the FS and proposed plan; however, they stated that if RL submits the proposed plan, they may get a letter back from Ecology restating their planned path forward. Ecology does not want double coverage with the ROD and the RCRA Permit, based on difficulties managing a similar situation at 100 N Area. Ecology stated that even though they intended to use the RCRA Permit for the decision document, a remedial action work plan could be used to implement the closure activities. RL re-stated their intention to maintain their commitment to provide the revised FS and Proposed Plan per the letter dated August 31, 2006 to Ecology. RL will review Ecology's letter, when/if received and will discuss a path forward.

200-CW-1

(M-015-38B, 5/31/09, Feasibility Study/Proposed Plan) Ecology

- Issue resolution meetings between Ecology and RL on the MG-5 SAP are underway.
- Ecology is preparing a letter to authorize remedial investigation at 216-U-10 limited to the shallow borehole and three test pits.

200-ZP-1, 200-PW-1/3/6 OU Group

200-ZP-1

(M-15-48B, 9/30/07, Feasibility Study/Proposed Plan) EPA

- Remediation Treatment Status:
 - Between October 1, 2006 and August 5, 2007 the 200-ZP-1 pump-and-treat system average pumping rate was approximately 255 gpm (**Attachment 8**).
 - All ten 200-ZP-1 extraction wells are currently on line pumping at approximately 270 gpm.
 - Trend data for carbon tetrachloride in well 299-W15-6 showed no significant changes from previous months (**Attachment 9**).
 - The hookup of new extraction wells 299-W11-45 and 299-W11-46 to the ETF transfer lines (**Attachment 10**) has been delayed due to a backorder on two flow totalizing meters.
 - EPA gave concurrence on installing a placeholder for the flow

totalizing meters to keep the project on schedule. The meter will be installed when they arrive. This is a deviation from the test plan (DOE/RL-2007-23, Rev. 0). Leak detection would still include:

- Daily walk down of lines.
- ETF monitoring for changes in production rates (at their end of the line) approximately four times/day.
- Daily monitoring pressure gauges at well head.
- The projected completion date is August 31, 2007.
- FH completed a preliminary evaluation of alternatives to using GAC, or alternatives to our current method of using GAC. These alternatives are currently being evaluated in further detail (e.g., waste generated, air permitting requirements).
- RI/FS Status:
 - FS and PP Report:
 - Documents are on schedule and are currently being revised based on DOE-RL comments.
 - Draft A document will be going into editing in approximately one week.
- Tc-99 Investigation Status:
 - T Tank Farm Investigations:
 - Drilling reached 381 ft on 8/10/07 in well T-5 well (C5244, 299-W10-32, replaced by well C5855, 299-W10-33); slug testing has been completed.
 - Purolite Resin Treatability Testing (**Attachment 11 and 12**):
 - The well 299-W15-44 treatment skid has been back online for 7 weeks now.
 - The well 299-W15-765 treatment skid has been back online for 4 weeks now.

200-PW-1, 200-PW-3, & 200-PW-6

(M-15-45B, 9/30/07, Feasibility Study/Proposed Plan) EPA

- The PW-1/3/6 FS is progressing. Comments from RL are being incorporated. The FS is on schedule for delivery to EPA on September 30, 2007.
- The PW-1/3/6 PP is progressing. Comments from the FH internal review are being incorporated. The decisional draft will go to RL the week of August 20, 2007. The PP is on schedule for delivery to EPA on September 30, 2007.
- EPA's comments on the PW-1/3/6 Remedial Investigation Report, Draft A, are being incorporated. Revision 0 anticipated transmittal date is August 31, 2007.
- Soil Vapor Extraction System (SVE):
 - The SVE system was turned back on April 2, 2007 at Z-9 Area. The average flow rate through July 29, 2007 was 300 cfm.
 - The system was moved from Z-9 to Z-1A this week.
 - The passive system remains operational.
 - Monthly monitoring results for July 2007 are presented in **Attachment 13**.

200-CW-2/4/5 & 200-SC-1 OU Group

200-CW-2, CW-4, CW-5, & SC-1 (no change)

(M-15-40D, 4/30/08, Feasibility Study/Proposed Plan) EPA

- Draft TPA change packages are under review with RL for the 200-CW-5 and 200-SC-1 Operable Units.

200-TW-1 & 200-PW-5 OU Group

200-TW-1 & 200-PW-5

(M-15-42D, 12/31/11, Feasibility Study/Proposed Plan for TW-1 & PW-5) EPA

- EPA approved the Work Plan Addendum addressing the treatability test at BC Cribs and Trenches on July 23, 2007.

200-TW-2 OU Group

200-TW-2 (no activity)

(M-15-42E, 12/31/11, Feasibility Study/Revised Recommended Remedy(ies) for TW-2) Ecology

200-PO-1, 200-PW-2/4, 200-MW-1 OU Group

200-PO-1 (No change)

(M-13-10A, 9/30/07, RI/FS Work Plan) Ecology

- DQO
Work continued on an internal draft of the 200-PO-1 DQO Report in support of the RI/FS Work Plan.
- SAP
Work continued on a draft 200-PO-1 Characterization SAP to support the RI/FS Work Plan development. This SAP along with the existing Monitoring SAP (DOE/RL-2003-04 Rev.1) will be included in the Draft A Work Plan due to Ecology September 30, 2007.
- Work Plan
Work continued on drafting the 200-PO-1 Draft A Work Plan.

200-PW-2 & 200-PW-4

(M-15-43D, 12/31/10, Feasibility Study and Revised Recommended Remedy(ies)) Ecology

- At the July UMM, Ecology stated that a letter is forthcoming on their recommended pathforward for finalizing the Draft RI that was previously submitted to Ecology. On July 30, a meeting was held with John Price/Ecology, Tony Miskho/FH, and Phil Rogers/FH to discuss the pathforward on the TSD closure plans previously submitted to Ecology.

200-MW-1

(M-15-44B, 12/31/08, Feasibility Study/Proposed Plan) EPA

- Drilling the high-risk borehole in the 216-A-2 Crib continues and is at a depth of approximately 248 ft bgs as of August 14th. The initial 10-in diameter casing was extended to a depth of 84 ft bgs, isolating the main zones of elevated radioactivity. An 8-in diameter casing has been installed and will support the borehole until total depth is reached.
- Comments from EPA on the Draft B RI have been received and are being dispositioned.
- The direct push in 216-A-21 Crib was completed in July.

200-BP-5 & 200-LW-1/2 OU Group

200-BP-5

(M-13-06B, 3/31/07, RI/FS Work Plan, Completed) EPA

(M-15-21A, 10/31/10, Feasibility Study/Proposed Plan) EPA

Work Plan:

- Met with EPA on July 31, 2007 and the following comment clarification was provided:
 - Create Power Point Presentations for wells A-E and H similar to the N well presentation provided on July 31, 2007. These presentations will provide the necessary graphical presentation of existing data, known contamination, and necessary hydrogeological data for judging the purpose of the wells as required in EPA's comments for the Work Plan received May 16, 2007 by FH.
 - Incorporate the presentations into a revised DQO report (WMP-28945 Rev 1). The presentations will also be provided in an appendix of the revised DQO.

Drill two groundwater monitoring wells (N and O) this summer.

- EPA approved the N well for drilling this summer at the above mentioned presentation which was provided to DOE and EPA on July 31, 2007 (See Figure 1, **Attachment 14**).
- Drilling scheduled to start late August at the O well (see Figure 2, **Attachment 15**). Awaiting finalization of documents and bid award. Immediately after the O well is drilled the N well will be drilled.

- BP-5 Waste Control Plan Addendum was submitted to EPA August 6 for these two wells.

Groundwater Monitoring:

- Added three wells to the monitoring network (299-E33-40, 699-49-55B and 699-55-55) to resolve plume configurations.
- 699-55-55 is being monitored to understand Tc-99 concentrations in the groundwater north of the 699-53-55C well (see Figure 3, **Attachment 16** & Figure 4, **Attachment 17**).
- The 299-E33-40 and 299-49-55B wells are to provide additional monitoring points to help resolve the contamination recently found in the confined aquifer at well 299-E33-50 the new F well (see Figures 5 and 6, **Attachment 18**).

200-LW-1/200-LW-2

(M-15-46B, 12/31/11, Feasibility Study/Recommended Remedy) Ecology

- Ecology and DOE agreed to incorporate the RI report into the FS. This will include the previous and supplemental investigations.

200-UR-1, 200-MG-1/2 & ECO OU Group

200-UR-1

- Radiological surveys for BC Control Area complete for the fiscal year. All areas from the Dunes south have been cleared for downposting.
- West Lake DQO strawman is in final stages of development.
- West Lake opportunistic field sampling and analysis complete – evaluation in process.
- A TPA change package in process to move all remaining 200-UR-1 sites except West Lake and BC Control Area to 200-MG-1 Operable Unit.
- Expedited cleanup of portions of BC Control Area is being considered.

200-MG-1/200-MG-2 Model Group 1 Sites

(M-15-49A, 12/31/08, MG-1 Feasibility Study/Recommended Remedy) Ecology

(M-15-49B, 12/31/08, MG-2 Feasibility Study/Proposed Plan) EPA

- Strategy and communication approach for preparation of 200-MG-1/2 Feasibility Studies is in process. A meeting was held with regulators on 8/2/07 to obtain input. Various meetings with regulators and stakeholders are planned during development of the reports.
- Development of Feasibility Studies for 200-MG-1/2 Waste Sites is in process.
- Incorporation of 200-ST-1 sites into 200-MG-1 is pending approval of the 200-ST-1 TPA Change Request Package.
- Reassignment of other (typically no action) sites into 200-MG-1/2 will be accomplished via a TPA Change Request.

Ecological Risk Assessment

- Environmental Risk Assessment sampling data evaluation and report preparation is in process.
- The external stakeholder participant data review meeting for the Ecological Risk Assessment has been scheduled for September 19th. The Phase III data and summary statistics will be provided, with the links and user information for the Central Plateau Ecological Risk Assessment website.

200-BC-1, 200-IS-1, 200-SW-1/2 OU Group

200-BC-1

(M-15-51, 4/30/10, Feasibility Study/Proposed Plan) EPA

- EPA comments received on Draft A DQO summary report and SAP addressing electrical resistivity correlation. Reviewed draft responses to comments with EPA 6/28. Incorporating recommendations of the Expert Panel.
- EPA approved SAP for Phase 1 of the excavation-based treatability test on 6/28/07. Will start Direct Push Technologies (DPT) campaign at the end of July. Installation of DPT holes and logging began August 1.
- Draft A of the Treatability Test Plan, including SAP, was transmitted to EPA 6/18/07.

200-IS-1

(M-13-27, 6/30/07, RI/FS Work Plan) Ecology

- The 200-IS-1 Work Plan and SAPs was delivered to Ecology by June 28, 2007.
- RL and ORP conducted WP and SAPs briefing on July 19, 2007.
- Ecology has requested an extension to September 25, 2007 for review of the WP and SAPs.

200-SW-1/2

(M-13-28, 9/30/07, RI/FS Work Plan) Ecology

- The 200-SW-1 and 200-SW-2 OU RI/FS Work Plan (Draft B) development continues with full intent of delivery to Ecology by September 30, 2007.

Supplemental Characterization

- **Model Group 5 SAP** – Ecology comments are being addressed and a revised SAP is being prepared. Comment resolution meetings were held on June 31 and July 7. Delays in gaining approval of the SAP will delay field activities.
- **Supplemental Work Plan** – Comments were received from Ecology on 7/31. RL sent a letter asking for clarification on 4 of the comments. EPA comments have been incorporated into a redline that is undergoing internal team review. Ecology comments are being reviewed and responses are being developed. RL is expecting a response to their request for clarification, which may be handled with a comment resolution meeting. Delays in gaining approval of the Work Plan will delay field activities.

D&D OUs

200-CW-3 EPA

- The remediation completion reports for sites 216-N-2, -3, and -5 are complete and signed by RL and EPA.
- Site 216-N-5 has been backfilled and will be seeded in the fall.
- Site 216-N-7 sample analysis validation is complete and the remediation completion report will be ready for review the week of August 13.
- Status of 200 North, site N-7: FH Internal review of Remediation Completion Report completed. Plan to send report to RL and EPA for comments the week of August 13.

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Rail Car Disposition Options Study

- The railroad car disposition options study will begin in late August.

Ecology Sites in Proximity to 200-CW-3

Discussion during meeting: Ecology requested information on sites in 200 North that were originally assigned as Ecology-lead sites. Two sites, UPR-200-N-1 and UPR-200-N-2, were originally assigned to Ecology as part of the 200-UR-1 OU. These sites have subsequently been moved to the 200-MG-1 through a recent change package to Appendix C of the TPA. An additional change package is being developed to move these sites to 200-CW-3 to support cleanup actions in 200 North.

Deleted: <#>Status of 200 North, site N-7: FH Internal review of Remediation Completion Report completed. Plan to send report to RL and EPA for comments the week of August 13.¶

200-UW-1 Ecology

- ROD - Tri-Party workshops were completed on 6/15/07. The ROD is currently undergoing final technical review before being sent for legal review.
- TPA Change Request for reclassifying 216-U-12 Crib to a RCRA Past Practice (RPP) unit was approved at the July IAMIT meeting.
- TPA Change Request to change 216-U-15 from a CPP to a RPP was approved at the July IAMIT meeting.
- DOE continued working on remedial action goals (RAG) for 200-UW-1. Currently, FH is preparing technical basis letters to be transmitted to the EPA and Ecology in August describing how the approach being proposed satisfies the applicable or relevant and appropriate requirements of WAC 173-340-747(8), and other State and Federal regulations and guidance.
- A cultural review of the Area C borrow source has been challenged by Yakama Tribes and Washington State Department of Archaeology & Historic Preservation (DAHP). DOE-RL has transmitted letters to the DAHP and Tribes. A meeting is scheduled for August 16, 2007 with the tribes to discuss Memorandum of Agreement (MOA) language.
- Phase II of the 241-U-361 Settling Tank sludge sampling has begun and is scheduled to be completed by mid-August.
- At 11:29 am on 7/9/07 a raw water leak resulted in the release of approximately 458,440 gallons. The raw water was leaked into/around 216-U-1, with the majority of that collecting in the abandoned 2607-W5 Sanitary Sewer Tile Field. This area is north

of 16th Street. It is estimated that the water covered less than 2 acres. The leakage came from a 12" ductile raw water line that had been cement lined during Project L-397. The line has been repaired. **(See Attachment 19).**

Discussion during meeting: The representative from the Nez Perce Tribe indicated that information such as the raw water leak should be captured in the public record to support understanding of potential impacts on associated waste sites and on the groundwater. Currently, RL prepares occurrence reports; however, these are not available to the public or readily associated with waste sites or plumes. Ecology recommended that the Nez Perce, the State of Oregon, and/or the HAB submit a letter documenting their concern. A similar concern was raised for diesel spills; however, Ecology indicated that they have taken action to assure these are properly documented.

FACILITIES STATUS

- Received EPA comments on DOE responses to Regulator comments on the Draft A Remedial Design/Remedial Action Work Plan for the 221-U Facility. FH is preparing the Draft B RD/RAWP for internal FH review.
- Preparing PUREX canyon DQO summary report for internal FH review.

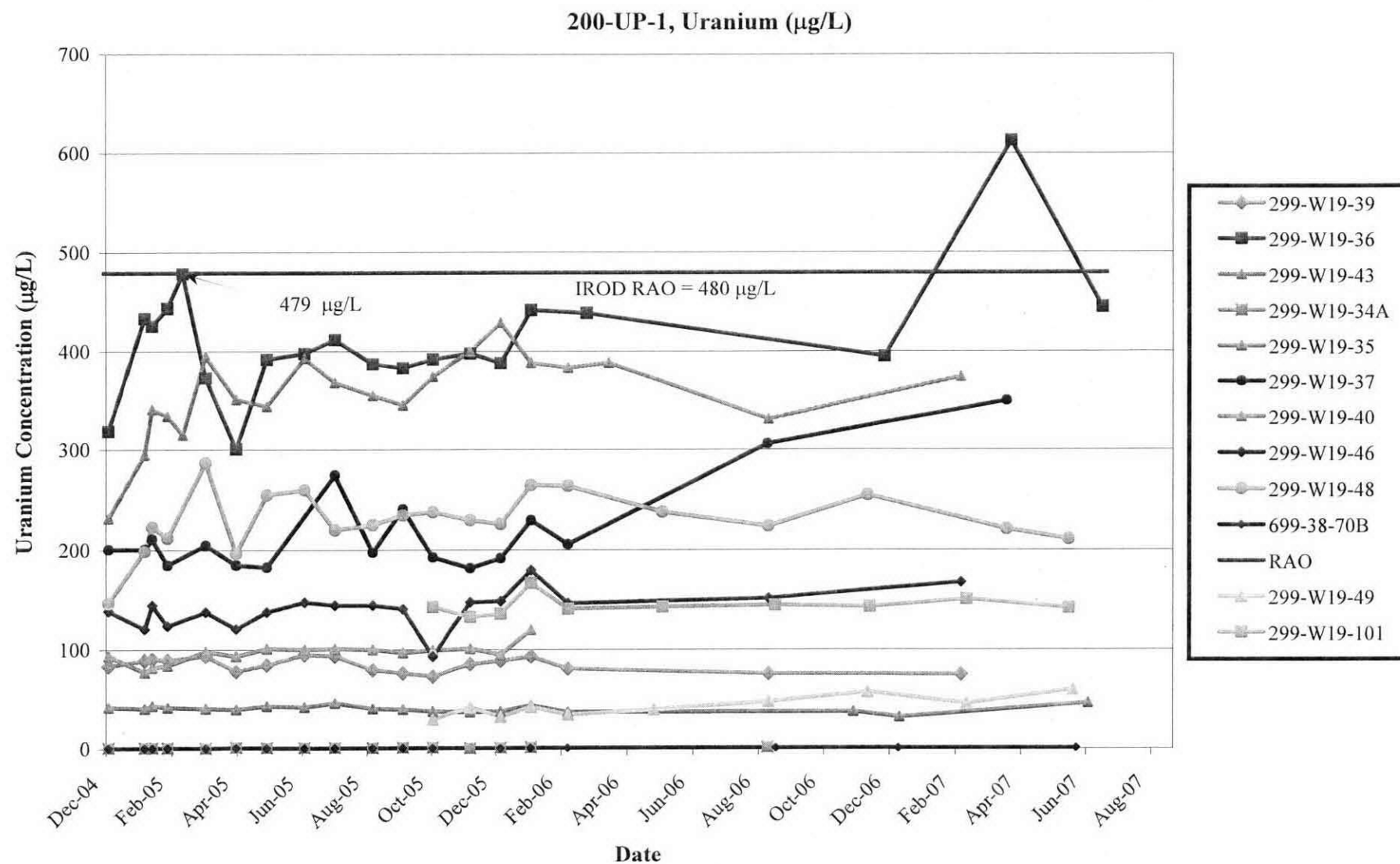
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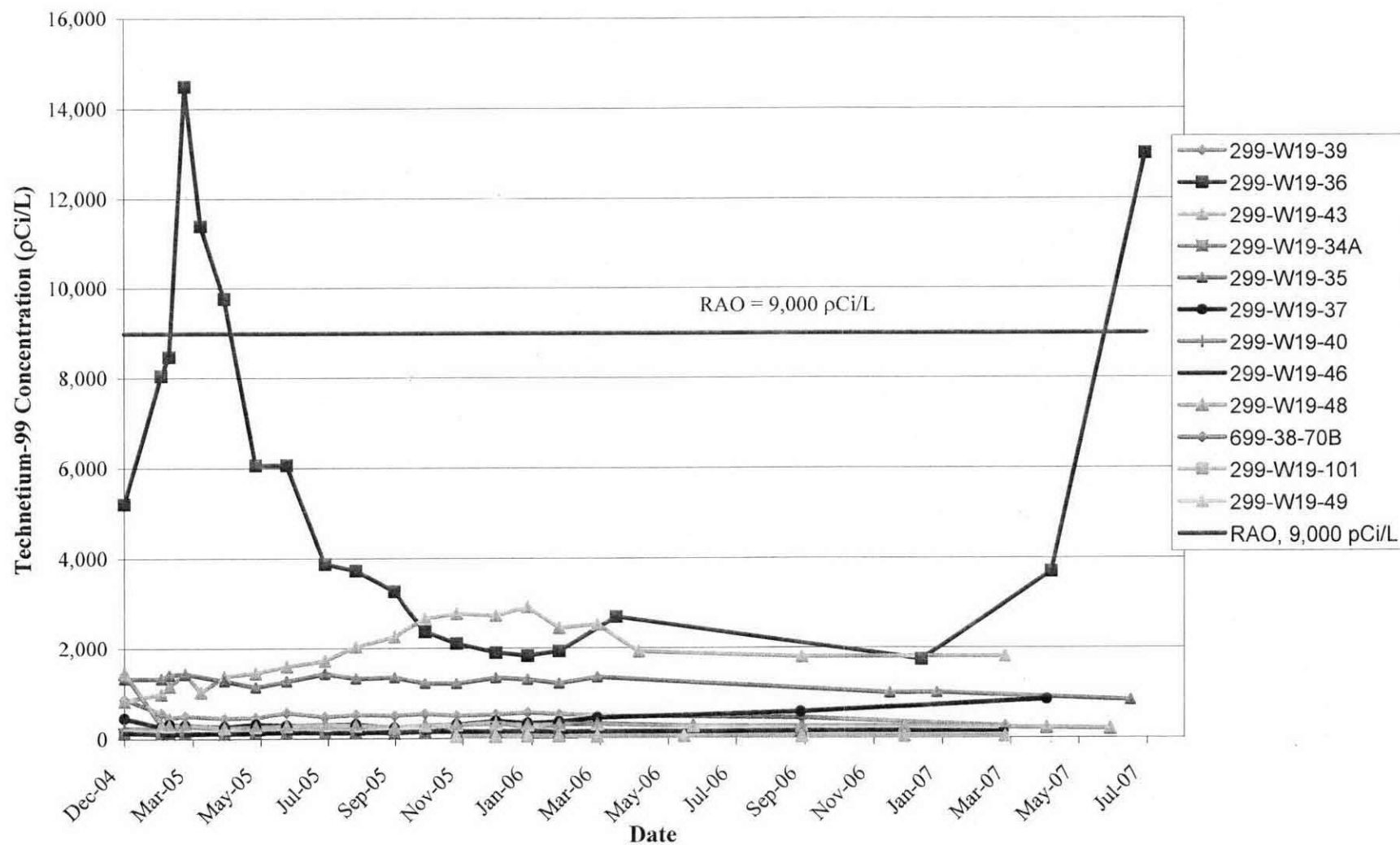
Facility Binning

- Awaiting agency response to RL draft Tri-Party Agreement agreement-in-principle for Central Plateau facility disposition, which was transmitted to EPA and Ecology on June 18, 2007. EPA received the draft AIP on June 21, 2007. EPA sent a letter on July 19 notifying DOE that EPA is taking a 30-day extension.

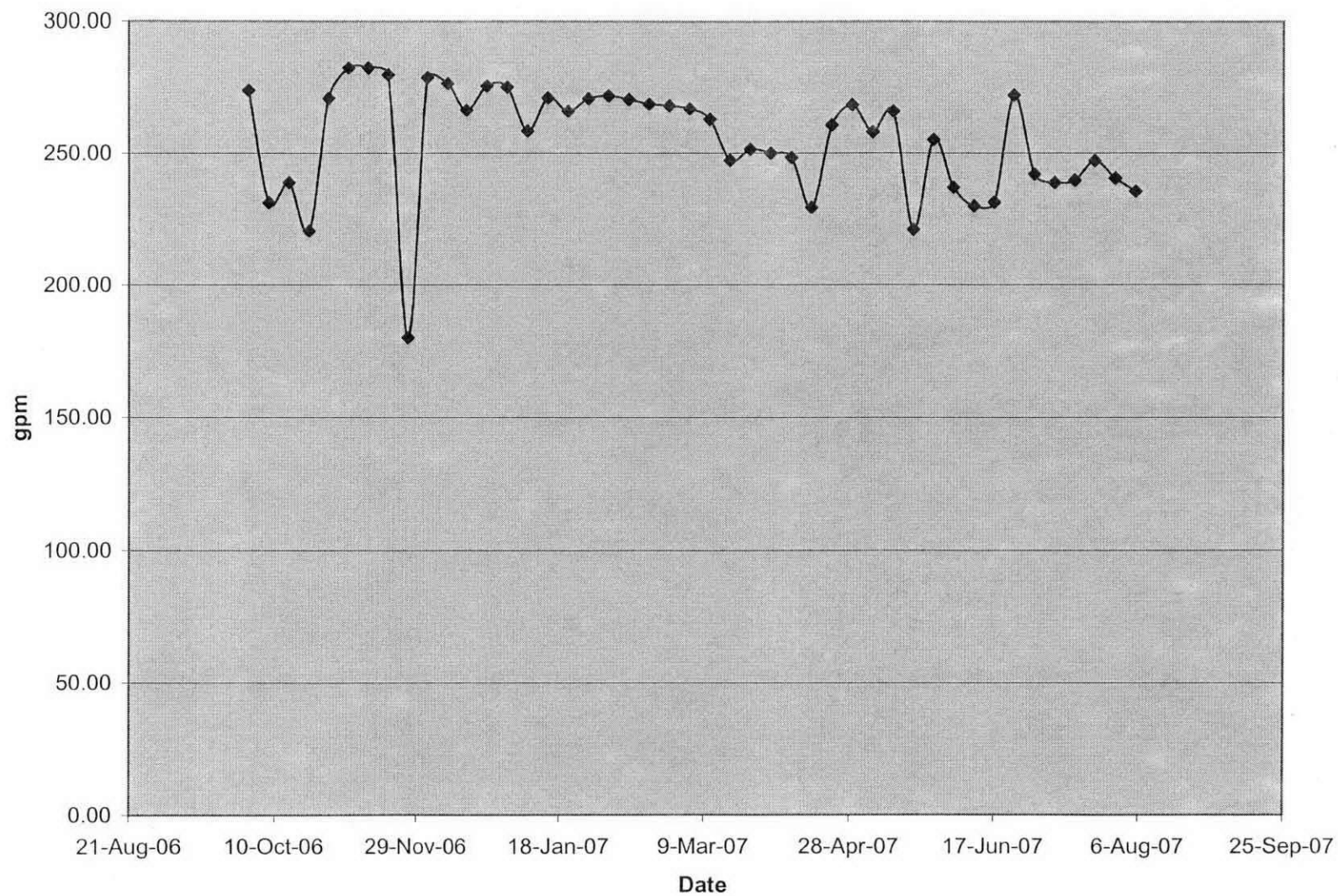
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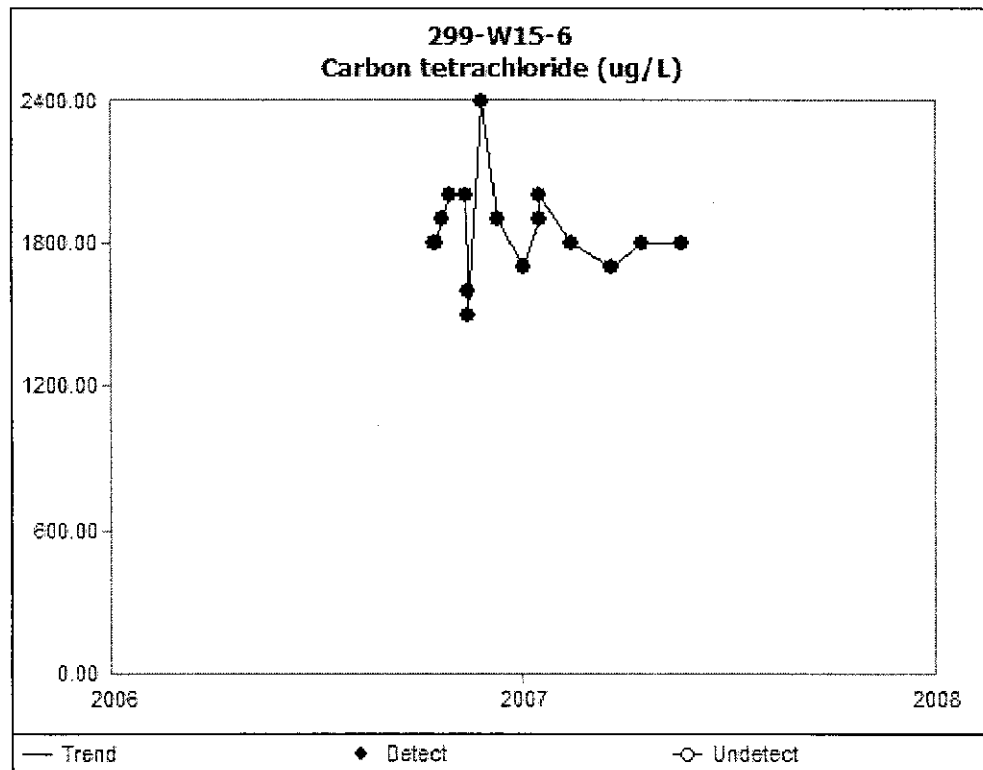
200-UP-1, Technetium-99 (pCi/L)



200-ZP-1 FY07 Pumping Rates



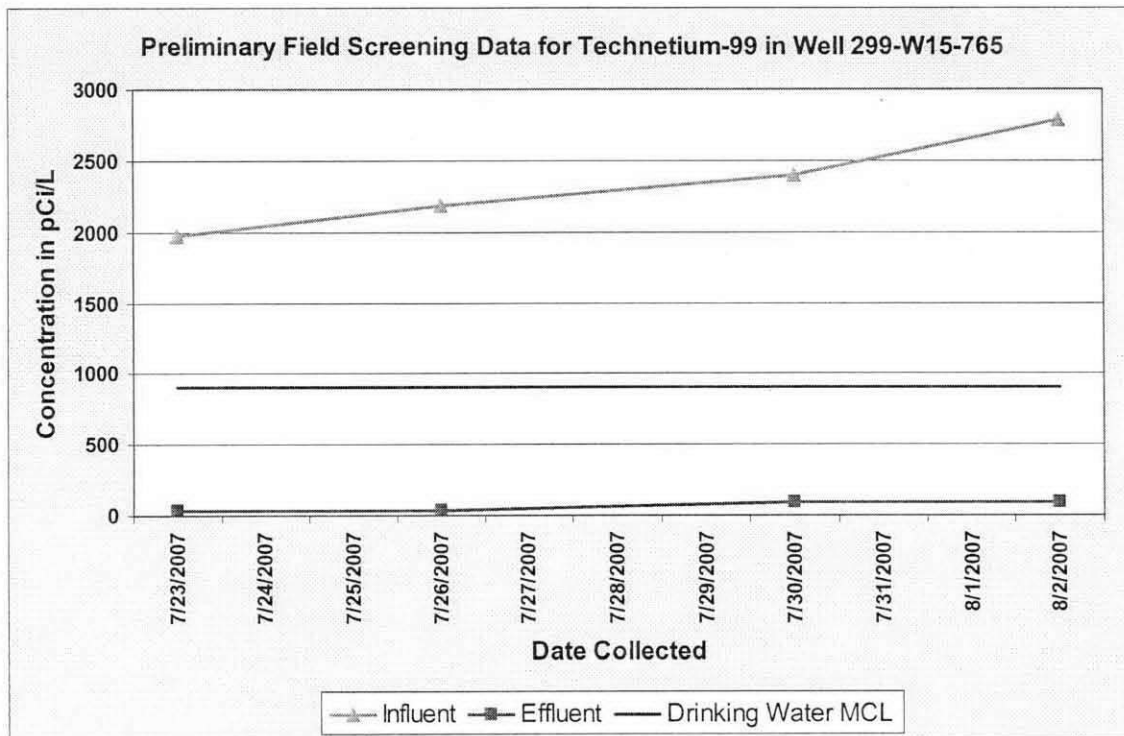
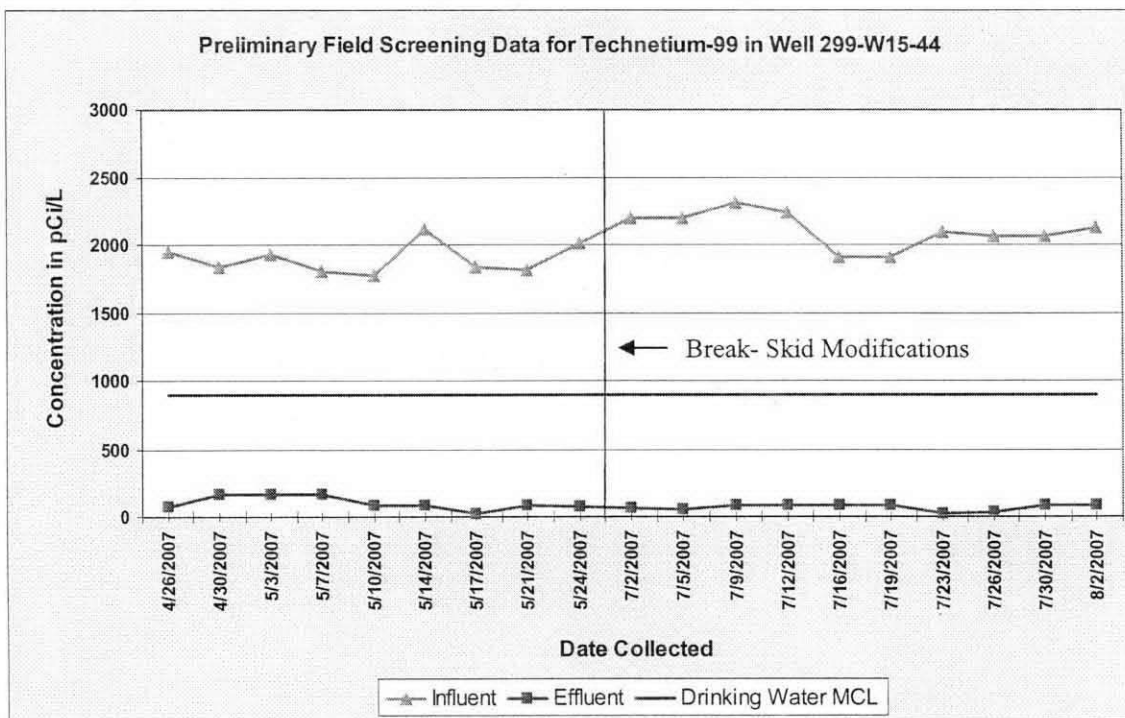
Attachment 9



T-TANK FARM WELLS TO ETF TIE-IN

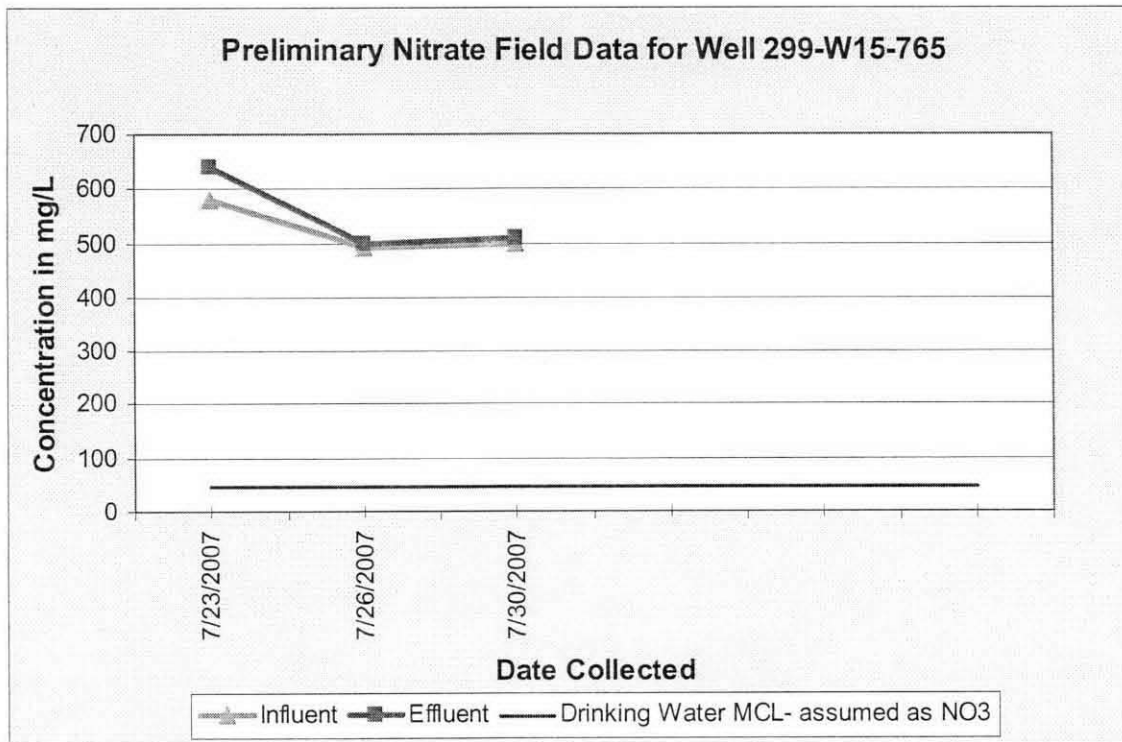
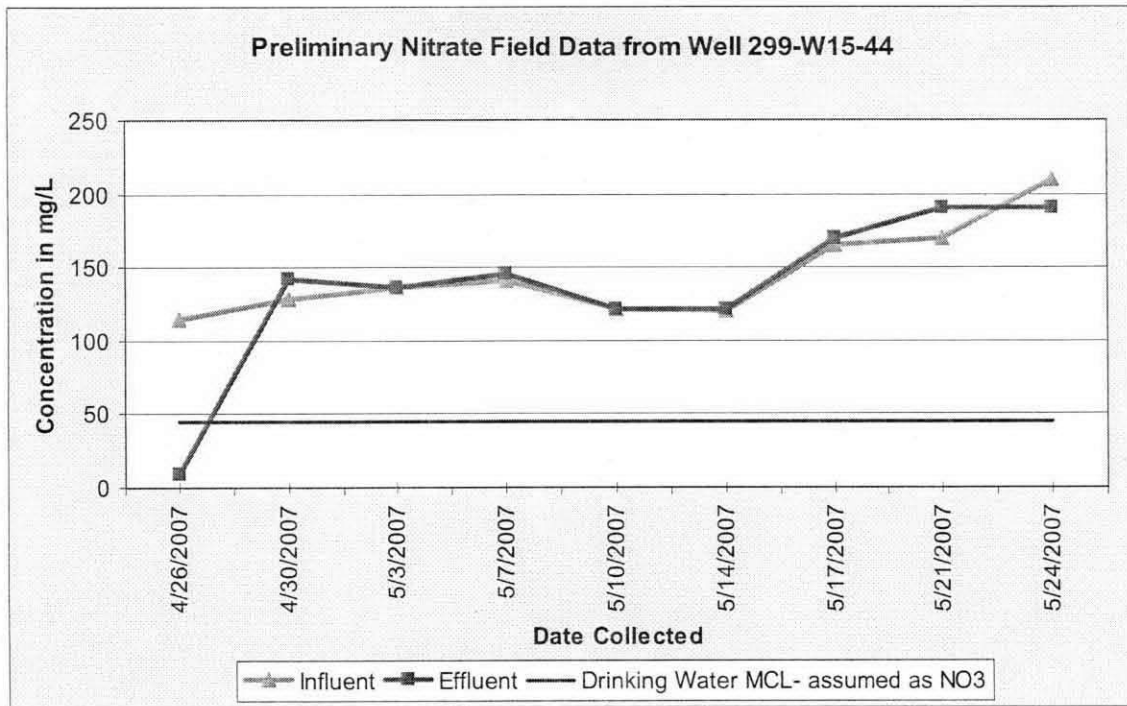
Attachment 11

200-ZP-1 Technetium-99 Field Screening Data (Extraction wells 299-W15-44 and 299-W15-765)



Attachment 12

200-ZP-1 Nitrate Field Screening Data (Extraction wells 299-W15-44 and 299-W15-765)



Attachment 13, Figure 1

Comparison of Maximum Carbon Tetrachloride Rebound Concentrations
Monitored at 200-PW-1 Soil Vapor Extraction Sites
FY 2003 - FY 2007

200-PW-1	Location	Site	July 2002 (Z-9) or October 2003 (Z-1A) - March 2004		July 2002 (Z-9) or April 2004 (Z-1A) - September 2004		October 2004 - June 2005		July 2005 - June 2006		July 2006 - July 2007	
			Maximum Rebound of Carbon Tetrachloride (ppmv)	months*	Maximum Rebound of Carbon Tetrachloride (ppmv)	months*	Maximum Rebound of Carbon Tetrachloride (ppmv)	months*	Maximum Rebound of Carbon Tetrachloride (ppmv)	months*	Maximum Rebound of Carbon Tetrachloride (ppmv)	months*
	(Well or Probe)											
	/feet bgs											
	CPT-17/ 10 ft	Z-9	9.0	21	9.9	27	11.4	5	2.5	12	1.6	9
	CPT-18/ 15 ft	Z-9	2.4	21	2.5	27	3.1	5	0	12		
	CPT-4A/ 25 ft	Z-1A										
	CPT-27/ 15 ft	Z-9									0	9
	CPT-4E/ 25 ft	Z-1A			2.4	0	2.4	9	2.4	0	3.3	10
	CPT-16/ 25 ft	Z-9	2.6	21	3.6	27	4.4	5	1.6	12	1.0	9
	CPT-31/ 25 ft	Z-12										
	CPT-32/ 25 ft	Z-1A	5.9	6			8.6	9	6.4	6	8.0	10
	CPT-30/ 28 ft	Z-18	0	6			1.6	9	1.2	6	0	10
	CPT-13A/ 30 ft	Z-1A	1.8	6	1.9	0	8.3	9	4.1	0	5.8	10
	CPT-7A/ 32 ft	Z-1A	9.5	6	1.9	0	4.4	9	3.8	0	3.9	10
	CPT-27/ 33 ft	Z-9	2.7	21	2.7	27	8.4	5	1.8	12		
	CPT-1A/ 35 ft	Z-12	18.3	6	18.0	0	14.0	9	17.2	0	10.0	10
	CPT-18/ 35 ft	Z-9									0	9
	CPT-28/ 40 ft	Z-9					5.4	0			59.3	10
	CPT-33/ 40 ft	Z-18					3.9	9			1.8	10
	CPT-34/ 40 ft	Z-18			1.8	0	3.0	9	2.0	0	1.4	10
	CPT-21A/ 45 ft	Z-9					7.9	0				
	CPT-30/ 48 ft	Z-18									4.2	9
	W15-220ST/ 52 ft	Z-9										
	CPT-9A/ 60 ft	Z-9	35.9	21	35.9	27	32.4	5	29.2	12	22.0	12
	CPT-28/ 60 ft	Z-9					68.3	0				
	CPT-C3872 / 63 ft	Z-1A					15.5	9	9.9	6	17.2	10
	CPT-16/ 65 ft	Z-9			4.2	27	6.7	5	5.6	0		
	CPT-21A/ 65 ft	Z-9	150	21	150	27	170	0	167	12	193	12
	CPT-1A/ 68 ft	Z-12					13.7	9			6.4	10
	CPT-30/ 68 ft	Z-18										
	CPT-13A/ 70 ft	Z-1A										
	CPT-24/ 70 ft	Z-9			9.1	27			5.2	12		
	CPT-32/ 70 ft	Z-1A					5.5	9			6.4	10
	W15-219SST/ 70 ft	Z-9			5.7	22						
	CPT-4A/ 75 ft	Z-1A										
	CPT-18/ 75 ft	Z-9			8.3	27			4.3	12		
	CPT-31/ 76 ft	Z-12										
	CPT-33/ 80 ft	Z-18										
	W15-82/ 83 ft	Z-9	85.8	21	85.8	27	95.8	5	8.1	12	3.9	9
	CPT-21A/ 86 ft	Z-9	244	21	244	27	209	5	223	12	207	12
	CPT-34/ 86 ft	Z-18										
	W15-95L/ 86 ft	Z-9										
	W15-218SST/ 86 ft	Z-9										
	CPT-28/ 87 ft	Z-9	258	21	258	27	246	5	245	12	262	12
	CPT-4B/ 90 ft	Z-1A										
	CPT-1A/ 91 ft	Z-12										
	CPT-4A/ 91 ft	Z-1A										
	CPT-9A/ 91 ft	Z-9										
	W15-85/ 91 ft	Z-9										
	W18-252SST/ 100	Z-1A										
	W18-152/ 101 ft	Z-12	12.4	6			16.0	9	16.2	6	16.3	10
	W15-8U/ 103 ft	Z-9							10.4	12	14.1	9
	CPT-4E/ 103 ft	Z-1A										
	W18-167/ 106 ft	Z-1A	266	6			196	9	174	6	3.0	10
	CPT-4F/ 109 ft	Z-1A					11.9	9			5.2	10
	W18-165/ 109 ft	Z-1A	205	6			35.2	9	394	6	3.2	10
	W15-217/ 114 ft	Z-9	458	21	467	27	374	5	19.7	12	16.5	9
	CPT-24/ 118 ft	Z-9			15.3	27			23.9	12		
	W15-220SST/ 118	Z-9			26.0	27			25.2	12		
	W18-158L/ 120 ft	Z-1A										
	W15-219SST/ 130	Z-9			0	22						
	W18-249/ 130 ft	Z-18	41.0	6			64.9	9	24.1	6	19.7	10
	W18-248/ 131 ft	Z-1A	180	6			249	9	67.0	6	131	10
	W15-95L/ 144 ft	Z-9	40.3	21	40.3	27	26.7	5	25.7	12	18.0	9
	W15-219SST/ 155	Z-9			9.5	22						
	W15-220L/ 163 ft	Z-9			7.5	27			13.2	12		
	W18-247L/ 167 ft	Z-18					9.3	passive	7.8	passive	10.0	passive
	W18-246L/ 170 ft	Z-1A					22.0	passive	25.3	passive	14.7	passive
	W15-219L/ 175 ft	Z-9			23.0	27			12.2	12		
	W18-252L/ 175 ft	Z-1A					18.0	passive	16.9	passive	12.2	passive
	W15-8L/ 176 ft	Z-9	13.1	21	13.1	27	2.1	5	5.4	12	7.9	9
	W15-84L/ 180 ft	Z-9	25.9	21	25.9	27	23.0	5	14.0	12		
	W15-6L/ 182 ft	Z-9										
	W18-10L/ 183 ft	Z-18					12.2	passive	14.1	passive	13.8	passive
	W15-220SST/ 185	Z-9										
	W18-7/ 197 ft	Z-1A					24.6	passive	33.8	passive	39.3	passive
	W18-12/ 198 ft	Z-18					9.9	passive	9.4	passive	4.8	passive
	W18-11L/ 199 ft	Z-18					7.3	passive	9.0	passive	8.4	passive
	W18-6L/ 208 ft	Z-1A					23.2	passive	24.4	passive	15.8	passive
	W15-46/ 217 ft	Z-9							4.7	12	5.7	9

* - based on location (Z-1A/18/12 or Z-9) of monitoring point; specific points may be beyond SVE zone of influence during particular operating configurations

- Z-18 and Z-12 wells off-line Oct 96 - Apr 98

- CPT-1A, CPT-9A, and possibly CPT-7A appeared to be beyond SVE zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)

- CPT-9A, CPT-21A, CPT-28 beyond SVE zone of influence in May 96 based on CCl4 concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1)

Carbon Tetrachloride Rebound Concentrations
Monitored at 200-PW-1 Soil Vapor Extraction Sites
July 2006 - July 2007

200-PW-1		07/26/2006	08/30/2006	09/26/2006	10/25/2006	11/30/2006	12/19/2006	01/31/2007	02/27/2007	03/21/2007	04/18/2007	05/29/2007	06/27/2007	07/25/2007
Location (Well or Probe)	Site	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)	CCl4 (ppmv)
CPT-17/ 10 ft	Z-9				1.2	1.2	1.2	1.4	1.6	1.5				
CPT-18/ 15 ft	Z-9													
CPT-27/ 15 ft	Z-9				0	0	0	0	0	0				
CPT-4E/ 25 ft	Z-1A	0	0	0							3.2	3.3	1.8	1.5
CPT-16/ 25 ft	Z-9				0	1.0	0	0	1.0	0				
CPT-32/ 25 ft	Z-1A	0	0	0	0	1.2	2.1	3.4	6.0	5.7	8.0	7.6	7.1	5.3
CPT-30/ 28 ft	Z-1A	0	0	0							0	0	0	0
CPT-13A/ 30 ft	Z-1A	2.4	2.5	2.4	3.3	2.9	5.8	1.6	5.0	2.2	1.8	3.7	2.4	2.1
CPT-7A/ 32 ft	Z-1A	2.0	1.9	1.2	1.9	2.5	2.6	3.2	3.4	3.8	3.9	2.7	2.7	2.5
CPT-27/ 33 ft	Z-9													
CPT-1A/ 35 ft	Z-12	11.0	13.4	10.2	10.0	4.6	5.1	4.4	7.3	2.8	4.2	1.2	6.6	7.2
CPT-18/ 35 ft	Z-9				0	0	0	0	0	0				
CPT-28/ 40 ft	Z-9	5.5	4.3	4.8							8.6	59.3	4.9	5.5
CPT-33/ 40 ft	Z-18	0	1.3	1.6							1.5	1.8	1.4	1.3
CPT-34/ 40 ft	Z-18	0	1.3	1.3							1.2	1.4	1.1	1.1
CPT-21A/ 45 ft	Z-9													
CPT-30/ 48 ft	Z-9				0	4.2	3.1	2.9	1.5	1.1				
CPT-9A/ 50 ft	Z-9	32.8	40.7	43.3	30.6	42.6	42.0	43.7	39.5	27.4	39.7	39.1	43.6	37.5
CPT-9A/ 60 ft	Z-9	12.8	9.8	15.7	14.2	16.2	13.1	13.2	7.2	10.7	12.9	12.1	12.1	22.0
CPT-28/ 60 ft	Z-9													
CPT-C3872 / 63 ft	Z-1A	2.1	2.2	2.4	3.5	5.5	6.1	7.8	12.2	10.1	11.5	15.2	16.8	17.2
CPT-9A/ 64 ft	Z-9	33.8	33.8	33.9	28.1	32.3	28.9	16.7	29.9	26.1	23.4	31.4	32.4	30.4
CPT-16/ 65 ft	Z-9													
CPT-21A/ 65 ft	Z-9	153	132	137	123	120	123	127	138	101	119	105	193	112
CPT-1A/ 68 ft	Z-12	13.2	12.5	5.6							6.2	0	0	6.4
CPT-24/ 70 ft	Z-9													
CPT-32/ 70 ft	Z-1A	4.2	4.3	3.5							5.2	6.0	6.4	6.3
W15-219SST/ 70 ft	Z-9													
CPT-18/ 75 ft	Z-9													
W15-82/ 83 ft	Z-9				0	0	0	2.3	3.9	0				
CPT-21A/ 86 ft	Z-9	179	171	194	159	169	164	189	170	119	161	125	207	183
CPT-28/ 87 ft	Z-9	180	185	216	181	202	196	0	209	119	182	147	262	162
W18-152/ 101 ft	Z-12	10.8	12.5	13.3	13.0	14.4	13.8	15.1	16.3	13.1	13.8	12.6	13.7	11.8
W15-8U/ 103 ft	Z-9				2.4	6.1	1.2	4.6	14.1	1.7				
W18-167/ 106 ft	Z-1A	0	0	0	0	0	0	3.0	1.1	0	0	0	3.0	0
CPT-4F/ 109 ft	Z-1A	1.2	2.9	0							4.1	5.2	0	0
W18-165/ 109 ft	Z-1A	---	0	0	0	0	0	2.5	2.2	0	0	0	3.2	0
W15-217/ 114 ft	Z-9				0	0	0	7.0	16.5	0				
CPT-24/ 118 ft	Z-9													
W15-220SST/ 118 ft	Z-9													
W18-249/ 130 ft	Z-18	4.6	19.4	18.1	16.8	18.4	8.8	19.7	16.1	16.0	15.0	15.4	18.1	14.9
W15-219SST/ 130 ft	Z-9													
W18-248/ 131 ft	Z-1A	---	27.2	43.0	42.1	45.3	30.7	52.7	131	4.7	70.0	34.4	65.9	60.9
W15-95L/ 144 ft	Z-9				10.0	16.2	15.3	16.9	18.0	0				
W15-219SST/ 155 ft	Z-9													
W15-220L/ 163 ft	Z-9													
W15-219L/ 175 ft	Z-9													
W15-9L/ 176 ft	Z-9				4.7	2.3	2.2	3.5	7.9	4.7				
W15-84L/ 180 ft	Z-9													
W15-46/ 217 ft	Z-9				0	0	0	4.0	5.7	0				
		(m) Unable to sample; well in use by Vista Engineering												
		(q) Unable to sample; well in use for geophysical logging												

Carbon Tetrachloride Concentrations
Monitored at 200-PW-1 Passive Soil Vapor Extraction Wells
July 2006 - July 2007

200-PW-1	7/26/2006	8/29/2006	9/26/2006	10/26/2006	11/28/2006	12/20/2006	1/30/2007	2/28/2007	3/21/2007	4/16/2007	5/30/2007	6/27/2007	7/25/2007
Location (Well or Probe) /feet bgs	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)	CCI4 (ppmv)
W18-6L/ 208 ft	---(b)	---(b)	15.8	3.7	1.4	0	4.8	4.9	8.1	8.5	11.3	12.3	8.2
W18-7/ 197 ft	11.0	15.3	0	5.6	6.0	2.1	7.8	14.1	11.8	21.1	39.3	18.4	16.3
W18-10L/ 183 ft	10.0	12.7	11.7	0	0	2.0	12.6	7.0	13.8	1.0	5.7	10.4	5.1
W18-11L/ 199 ft	3.0	8.4	1.3	0	0	0	4.5	3.4	3.2	0	3.3	4.3	2.0
W18-12/ 198 ft	0	4.8	0	0	0	0	1.3	0	0	0	0	1.4	0
W18-246L/ 170 ft	---(b)	---(b)	3.7	1.7	0	0	2.2	5.3	4.1	9.6	14.7	4.6	8.5
W18-247L/ 167 ft	0	5.7	1.0	0	0	0	1.4	0	5.1	0	0	10.0	5.7
W18-252L/ 175 ft	---(b)	---(b)	---(b)	---(b)	---(b)	---(b)	---(b)	2.1	4.5	8.1	12.2	12.0	3.7
(b) disconnected for use by Vista Engineering for cross-well seismic investigation													

Figure 1: Proposed N Well Location Map.

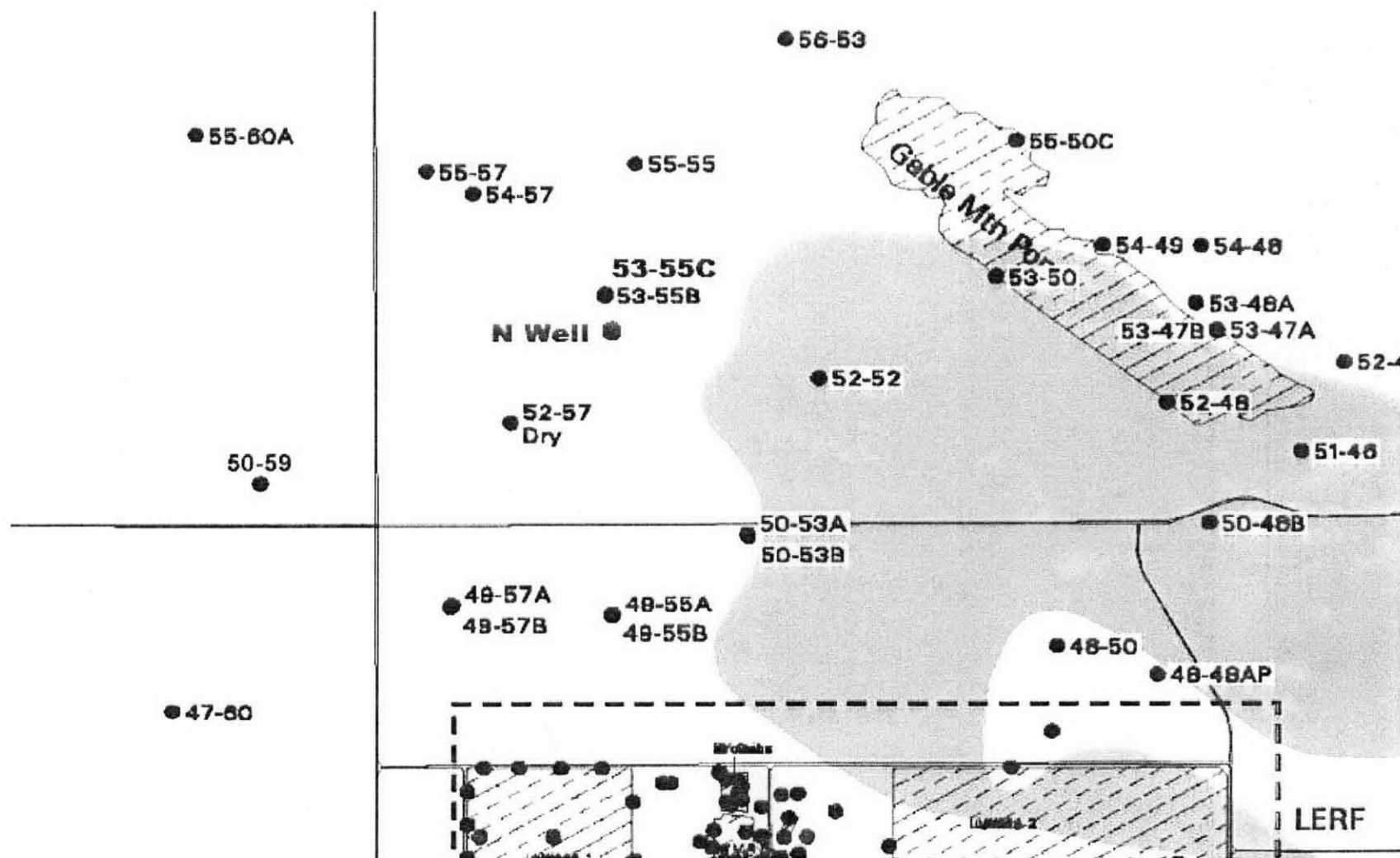
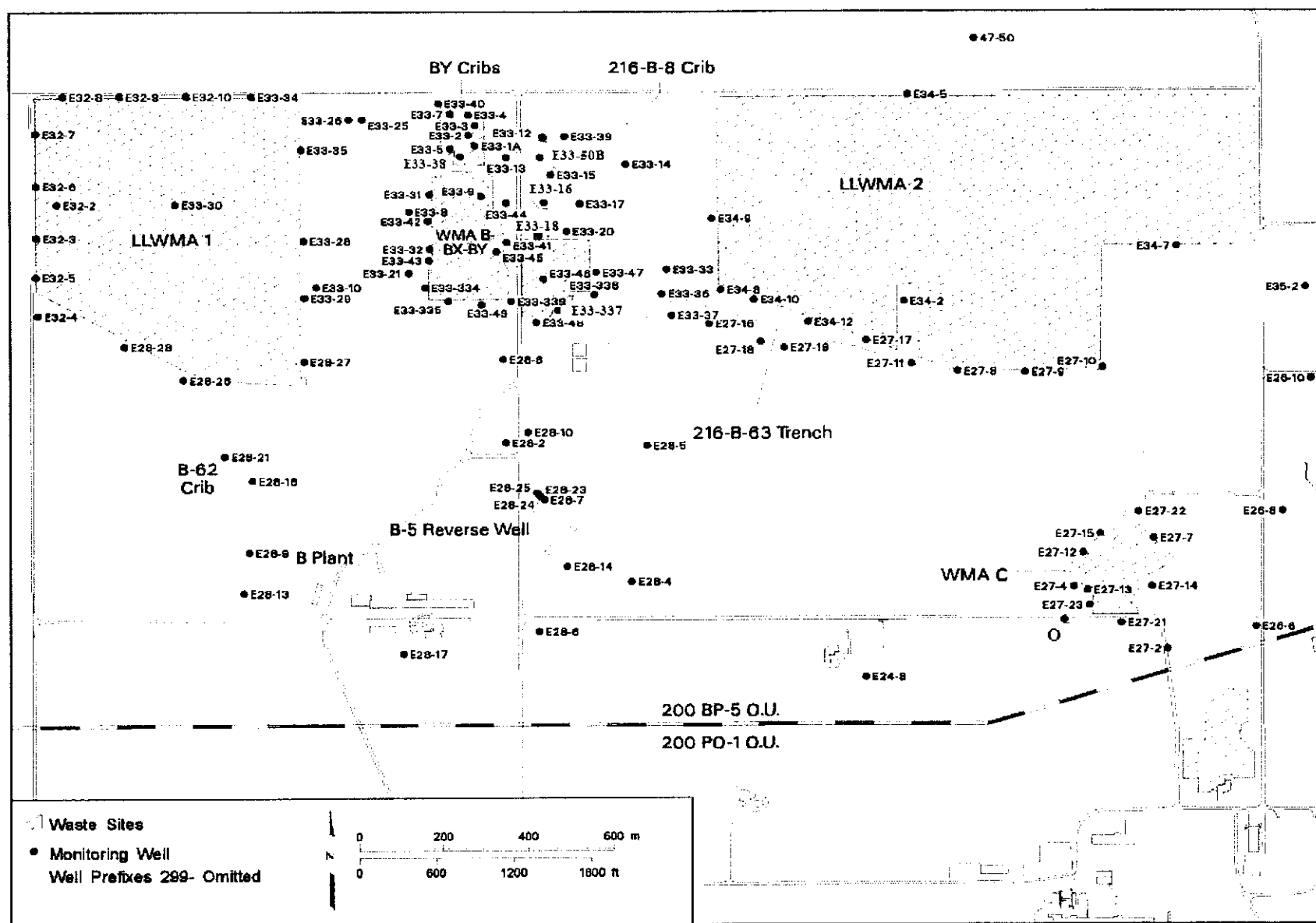


Figure 2: "O" Well Location Map.



can_thar04_08 October 12, 2004 3:00 PM

Figure 3: Location map of well 699-55-55.

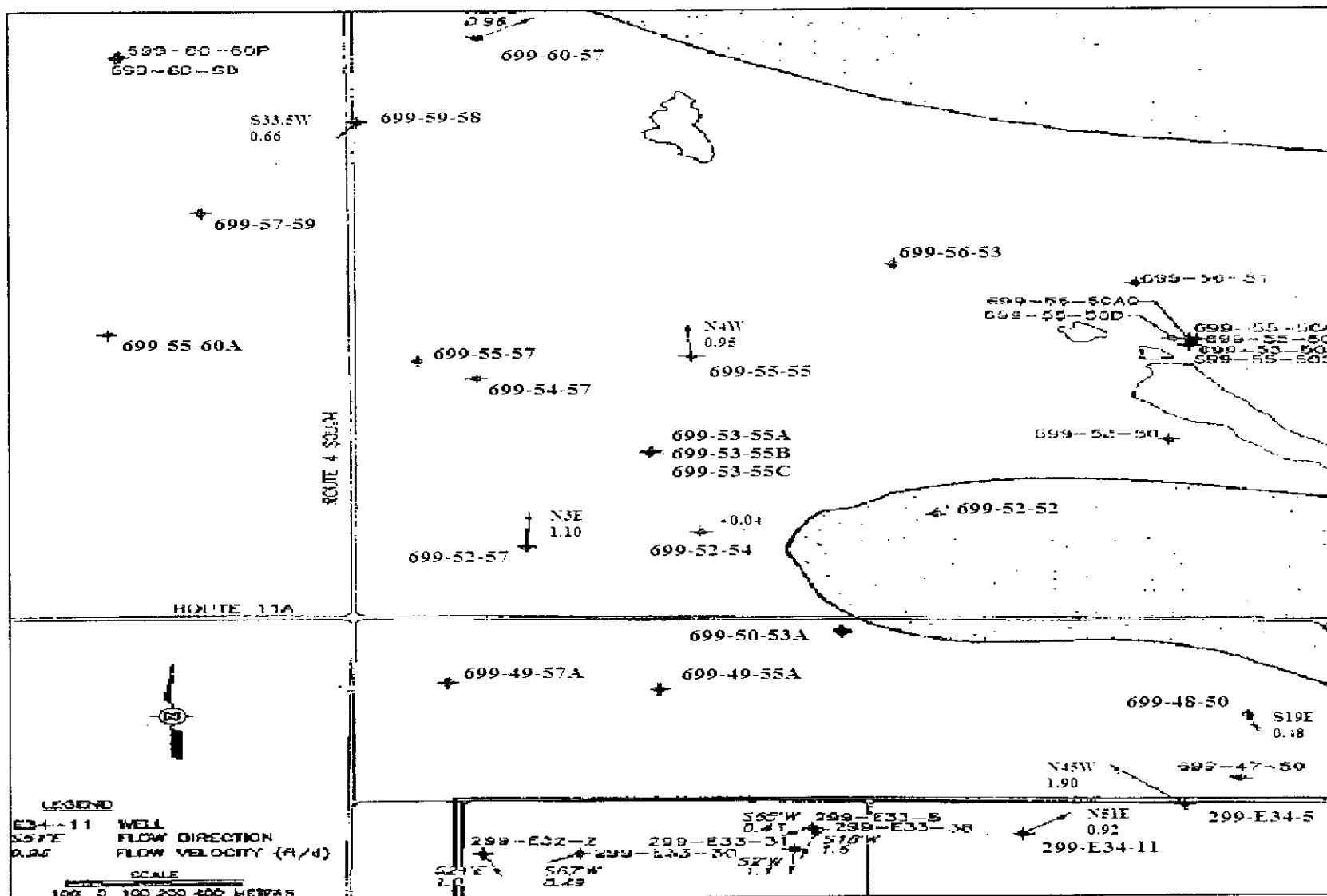


Figure 4: Tc-99 Plume Map Interpretation based on 2005 Groundwater Annual Report (PNNL 15070).

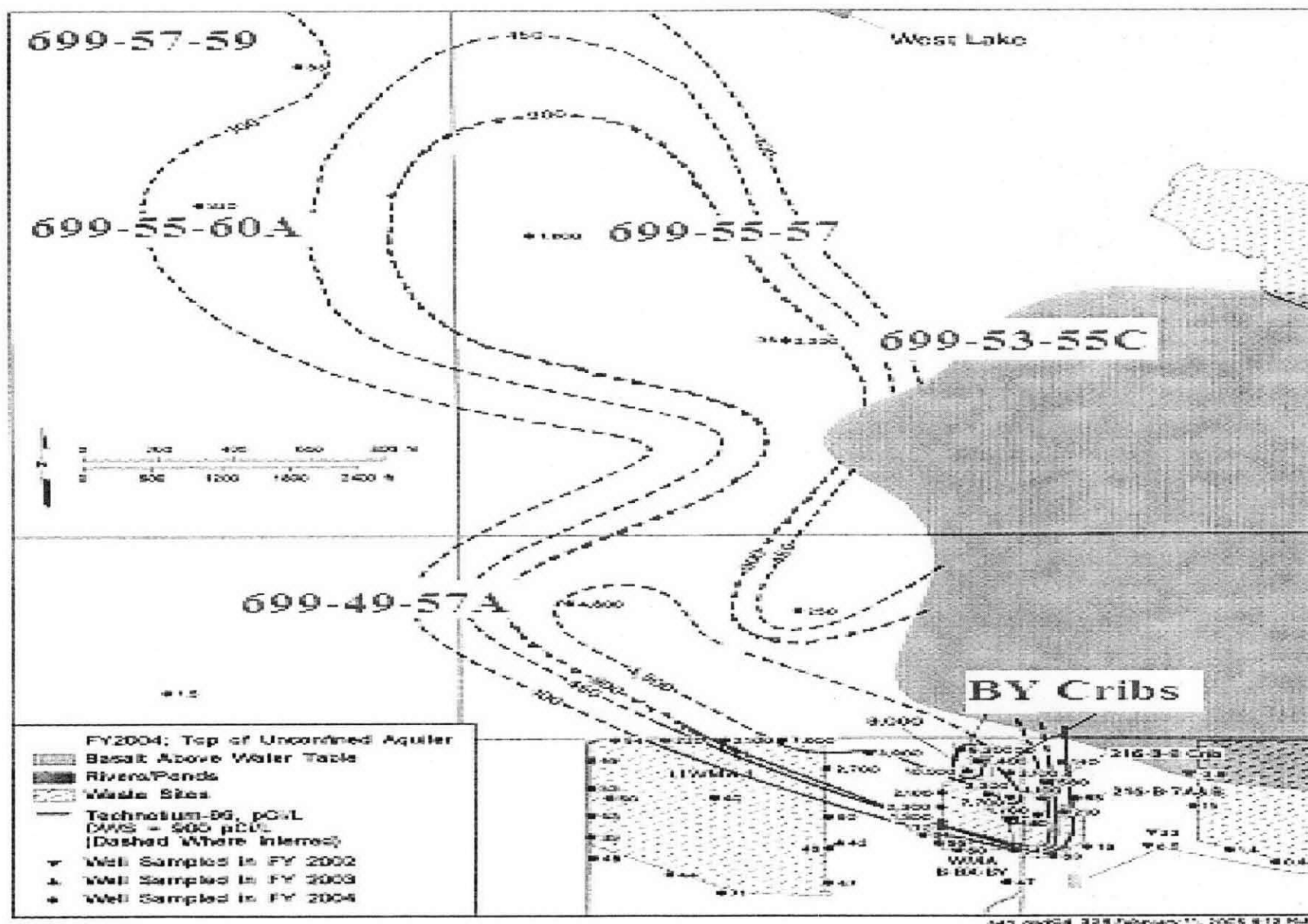


Figure 5: Additional Monitoring Well 299-E33-40 to Monitoring Network.

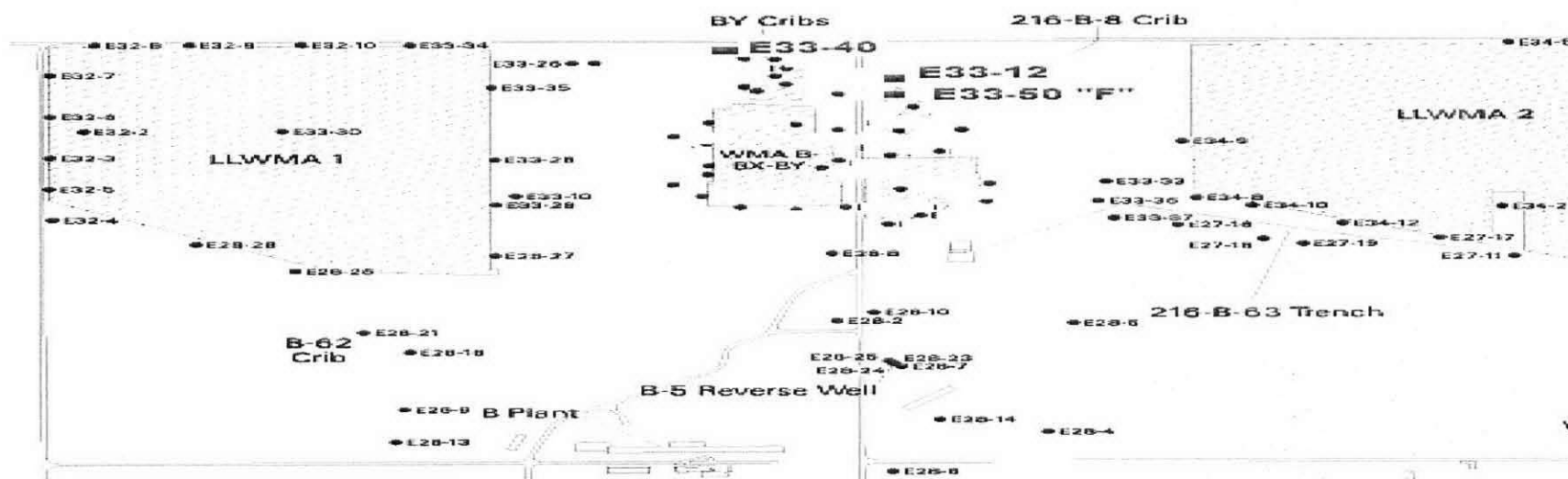
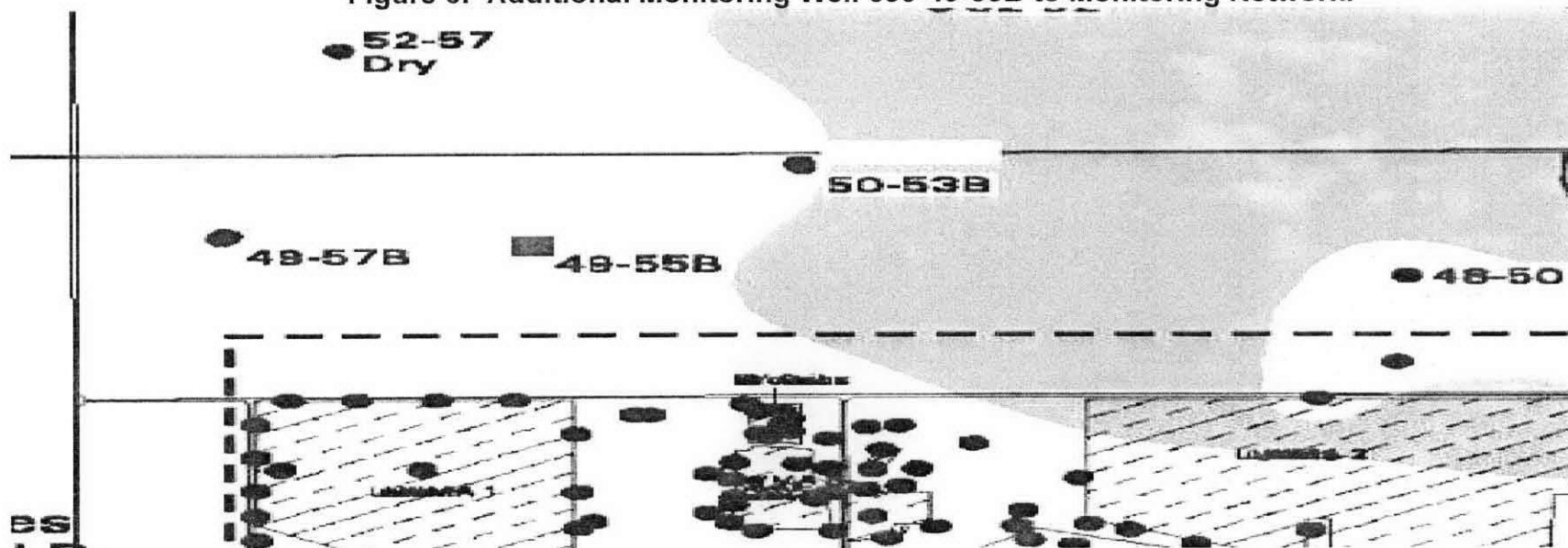


Figure 6: Additional Monitoring Well 699-49-55B to Monitoring Network.



ATTACHMENT 19



D&D OUs**200-CW-3 EPA**

- The remediation completion reports for sites ²¹⁶261-N-2, -3, and -5 are complete and signed by RL and EPA.
- Site 216-N-5 has been backfilled and will be seeded in the fall.
- Site 216-N-7 sample analysis validation is complete and the remediation completion report will be ready for review the week of August 13.

Rail Car Disposition Options Study

- The railroad car disposition options study will begin in late August.

Ecology Sites in Proximity to 200-CW-3

- *Status of 200 North, site N-7:* FH Internal review of Remediation Completion Report completed. Plan to send report to RL and EPA for comments the week of August 13.

Discussion during meeting: Ecology requested information on sites in 200 North that were originally assigned as Ecology-lead sites. Two sites, UPR-200-N-1 and UPR-200-N-2, were originally assigned to Ecology as part of the 200-UR-1 OU. These sites have subsequently been moved to the 200-MG-1 through a recent change package to Appendix C of the TPA. An additional change package is being developed to move these sites to 200-CW-3 to support cleanup actions in 200 North.

200-UW-1 Ecology

- ROD - Tri-Party workshops were completed on 6/15/07. The ROD is currently undergoing final technical review before being sent for legal review.
- TPA Change Request for reclassifying 216-U-12 Crib to a RCRA Past Practice (RPP) unit was approved at the July IAMIT meeting.
- TPA Change Request to change 216-U-15 from a CPP to a RPP was approved at the July IAMIT meeting.
- DOE continued working on remedial action goals (RAG) for 200-UW-1. Currently, FH is preparing technical basis letters to be transmitted to the EPA and Ecology in August describing how the approach being proposed satisfies the applicable or relevant and appropriate requirements of WAC 173-340-747(8), and other State and Federal regulations and guidance.
- A cultural review of the Area C borrow source has been challenged by Yakama Tribes and Washington State Department of Archaeology & Historic Preservation (DAHP). DOE-RL has transmitted letters to the DAHP and Tribes. A meeting is scheduled for August 16, 2007 with the tribes to discuss Memorandum of Agreement (MOA) language.
- Phase II of the 241-U-361 Settling Tank sludge sampling has begun and is scheduled to be completed by mid-August.

- At 11:29 am on 7/9/07 a raw water leak resulted in the release of approximately 458,440 gallons. The raw water was leaked into/around 216-U-1, with the majority of that collecting in the abandoned 2607-W5 Sanitary Sewer Tile Field. This area is north of 16th Street. It is estimated that the water covered less than 2 acres. The leakage came from a 12" ductile raw water line that had been cement lined during Project L-397. The line has been repaired. **(See Attachment 19).**

Discussion during meeting: The representative from the Nez Perce Tribe indicated that information such as the raw water leak should be captured in the public record to support understanding of potential impacts on associated waste sites and on the groundwater. Currently, RL prepares occurrence reports; however, these are not available to the public or readily associated with waste sites or plumes. Ecology recommended that the Nez Perce, the State of Oregon, and/or the HAB submit a letter documenting their concern. A similar concern was raised for diesel spills; however, Ecology indicated that they have taken action to assure these are properly documented.

FACILITIES STATUS

- Received EPA comments on ~~proposed~~ responses to agency comments on the Draft A Remedial Design/Remedial Action Work Plan for the 221-U Facility. FH is preparing the Draft B RD/RAWP for internal FH review.
- Preparing PUREX canyon DQO summary report for internal FH review.

Facility Binning

- Awaiting agency response to RL draft Tri-Party Agreement agreement-in-principle for Central Plateau facility disposition, which was transmitted to EPA and Ecology on June 18, 2007. EPA sent a letter on July 19 requesting a 30-day extension.

DOE regulator
EPA received the draft AIP on June 21, 2007, notifying DOE that EPA is taking
EAC